Regional Representatives Group Regional Transmission Problems and Opportunities List Organized by General Categories

The information below represents a compilation of the input from a wide range of participants at the July 21, 2003 RRG meeting in Portland, Oregon (as well as additional items extracted from written comments submitted before the July 21, 2003 RRG meeting and e-mails sent after the meeting).

This document is intended to serve as a tool to facilitate regional discussion about current and future problems and opportunities related to the regional transmission system.

At the July 31, 2003 RRG meeting, we hope this document will:

- o Help us track the problems and opportunities that have been identified with respect to the existing regional transmission system (and any more that are added)
- o Facilitate discussion about which of the identified problems and opportunities warrant action, focusing on the question of whether the RRG believes that there is broad consensus to act
- Facilitate discussion concerning whether, with respect to those problems and opportunities for which there is broad consensus to act, there is broad consensus that the RRG-based process for developing regional transmission solutions is the right forum for further work

During discussions at the July 21, 2003 RRG meeting, there was some discussion on:

- o From what perspective are we evaluating problems? Consumer interests?
- o What are we trying to accomplish? Lowest cost of delivered power? More efficient wholesale power markets?

A. Concerns About Current Market/Economic Factors:

- 1. Underutilized capacity (in view of current demand for capacity)
 - a. Phantom congestion especially due to disconnect between contract path use and actual system flows
 - b. ATC and TTC calculation
 - (i) Inconsistencies between transmission providers doesn't facilitate release of all usable capacity
 - (ii) Before-the-fact and after-the-fact ATCs do not line up
 - c. Transmission rights and management of transmission rights in real-time
 - (i) Lack of flexible, intermediate or "semi-firm" products
 - (ii) Lack of liquidity in secondary transmission market; limited ability of rights holders (including end users) to sell or trade their rights
 - (iii) Lack of efficient means to manage congestion cannot make use of diverse schedules or incs and decs to make more capacity available (including redispatch under current Order 888 tariffs)
- 2. Market power issues (transmission system, wholesale electricity markets, ancillary services)
 - a. Need ability to detect and correct abuses (including effective data gathering and enforcement tools
 - b. Need for comprehensive view of all products (transmission, energy, and ancillary services) and how they are affecting each other
 - c. Ability to address problems proactively rather than after-the-fact (creating incentives not to abuse market power)

- d. Need for equitable mitigation measures and in-region approach to mitigation
- e. Jurisdictional differences (some entities are regulated by FERC and by state PUCs, some entities are governed by state or federal statutes, and some entities are subject to Canadian regulatory provisions)
- f. Need for an independent entity to address market power issues

3. Access

- a. Disparate treatment of different types of customers (QFs/co-gens, IPPs, unbundled versus bundled end users)
 - (i) Not all generators obtain service on the same terms and conditions
 - (ii) Independent generators have to buy imbalance, but control areas can "exchange" inadvertent interchange
 - (iii) RAS requirements without consultation or compensation
 - (iv) QF/co-gen problems are not always the same as those for IPPs
 - (v) Price inequity for service to unbundled retail customers compared to bundled retail customer charges.
 - (vi) Different treatment regarding penalties for similar actions
- b. Asymmetry in obligations of different types of suppliers (transmission providers with state-imposed obligation to serve)
- c. Different sources of obligations (contracts, state laws and regulations, federal laws and regulations)
- d. Cumbersome process for end users to gain access
- e. Renewables how can they more easily interconnect with and utilize the transmission grid?

- f. Load-serving entities behind other utilities' systems (cumbersome process to gain access over dual-use facilities)
- g. Need to ensure that adequate transmission capacity is dedicated to moving power to serve regional retail loads, and in a manner that does not require load-serving entities to obtain transmission through competitive bidding
- 4. Lack of efficient prices; administrative inefficiency and complexity
 - a. Rate pancaking
 - b. Many transactions must be arranged with multiple service providers ("transactional pancaking")
 - c. No correlation between marginal price of transactions and actual cost
 - d. Lack of (price signals) incentives to "do the right thing"
 - e. Concerns about adding price signals

5. Ancillary Services

- a. Need for imbalance energy and ancillary services close to load centers
- b. Not all parties have adequate access to markets for ancillary services
- c. Fragmentation of ancillary services market
- d. Inability to hedge replacement energy costs related to long-term forced outages
- e. Inability for end-use resources to bid into ancillary services market (demand response)
- f. Market power in ancillary services arena
- g. No mechanism for IPPs or demand-side to act as ancillary services suppliers

- 6. Losses; loss methodology
 - a. Desire for a consistent methodology that more closely reflects actual losses, but concerns about potential cost-shifts

B. Short-Term Operational (Reliability) Concerns:

- 1. Lack of investment in reliability improvement
- 2. Poor tools for managing overloads on the system; conflicts among existing curtailment procedures
- 3. Fragmented operations (multiple control areas); lack of system-wide visibility in day ahead
- 4. How should we calculate load for reserve determinations?
- 5. Who creates reliability standards and who has to pay for them?
- 6. Generation response when system is stressed; disconnect between schedules and physical generation
- 7. No financial settlement for redispatch to address reliability issues in real time
- 8. Over-reliance on short-term and non-firm use of the system
- 9. Need for fair and efficient method to manage unscheduled (inadvertent) path flows

C. Long-Term (Planning and Adequacy) Concerns:

- 1. Adequacy standards and infrastructure
 - a. Includes generation, transmission, and DSM
 - b. Clarification needed on state role in transmission and generation adequacy?

2. Lack of sufficient infrastructure investment

- a. Need to ensure that sufficient and timely investment is made in the transmission system to serve load growth, to provide capacity to new users, and to alleviate congestion
- b. Multiple planning processes; limited construction progress
- c. Perceived lack of capital leads to over-use of short-term measures

3. Cost recovery

- a. Uncertainty about regulatory support for recovery
- b. Need for right people (benefiting parties) pay for system improvements
- 4. Fragmented planning need for regional planning process that integrates load, generation, DSM
 - a. Need to address uncertainty about what generation will be built and where it will be delivered (and it can change hourly, daily, seasonally)
- 5. Accommodation of technology innovation (and need for environment that fosters innovation)
- 6. Order 888 generation interconnection queuing process is inefficient
- 7. Disconnect between ability to identify needed solutions versus ability to implement the solutions (fragmentation)
- 8. Interregional (seams) issues with respect to planning

D. Implementation Issues and General Concerns:

- 1. Political and regulatory uncertainty
- 2. Seams (within the region and across the interconnection)

- 3. How to analyze cost/benefit and risk considerations, and who does the analysis?
- 4. Staging or phasing of implementation
- 5. Recognizing Canadian sovereignty
- 6. Contract enforceability (existing rights holders of all kinds)
 - a. *e.g.*, lack of effective remedy to deal with problems under current transmission service contracts
- 7. Liability issues
- 8. Credit issues how to manage exposure of service providers and suppliers to risks of nonpayment (especially imbalance and congestion charges in real time)
- 9. Security/Critical Infrastructure
 - a. Cyber and physical security requirements are coming from two directions: DOE and Department of Homeland Security (DHS).
 These requirements will affect non-federal and federal RTO West participants.
 - b. BPA has established criteria that it used to determine its own critical facilities and other PTOs may be required to do the same. As the requirements for these facilities become clearer, are there unique obligations for these critical facilities that should be the responsibility of RTO West?